

AMENDMENTS TO THE CLAIMS

Claims 1-13 (canceled)

Claim 14 (original): A method for operating a tertiary content addressable memory (CAM) cell, comprising:

setting a first of three binary storage elements to a first binary state to indicate a first tertiary state of said CAM cell,

wherein in response to said first binary storage element being set to a first binary state, said second and third binary storage elements are each set to a second binary state.

Claim 15 (original): The method of claim 14, further comprising,

setting the second of three binary storage elements to a first binary state to indicate a second tertiary state of said CAM cell,

wherein in response to said second binary storage element being set to a first binary state, said first and third binary storage elements are each set to a second binary state.

Claim 16 (original): The method of claim 15, further comprising,

setting the third of three binary storage elements to a first binary state to indicate a third tertiary state of said CAM cell,

wherein in response to said third binary storage element being set to a first binary state, said first and second binary storage elements are each set to a second binary state.

Claim 17 (original): The method of claim 16, wherein said first, second, and third tertiary states are members of a set consisting of the following elements,

a binary “0”;

a binary “1”; and

a “don’t care” state.

Claim 18 (original): The method of claim 14, further comprising:

reading the state of said first binary storage element, said reading further comprising the steps of,

precharging a first bit line controllably coupled to said first storage element to a predetermined level;

coupling said first bit line to said first binary storage element; and

coupling, sensing a change in potential of said first bit line;
wherein said reading does not change the state of said first storage element.

Claim 19 (original): The method of claim 15, further comprising:

reading the state of said second binary storage element, said reading further comprising the steps of,

precharging a second bit line controllably coupled to said second storage element to a predetermined level;

coupling said second bit line to said second binary storage element; and
sensing a change in potential of said second bit line;

wherein said reading does not change the state of said second storage element.

Claim 20 (original): The method of claim 16, further comprising:

reading the state of said third binary storage element, said reading further comprising the steps of,

precharging a third bit line controllably coupled to said third storage element to a predetermined level;

coupling said third bit line to said third binary storage element; and

after said coupling, sensing a change in potential of said third bit line;

wherein said reading does not change the state of said third storage element.